Commonwealth of Kentucky

Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020

Permittee Name:	**Calgon Carbon Corporation**
Mailing Address:	**P.O. Box 664** **Catlettsburg, Kentucky 41129**
Source Name:	**Same as above.**
Mailing Address:	**Same as above.**
Source Location:	**U.S. Route 23 S.** **Catlettsburg, Kentucky 41129**
Permit Number:	**V-00-015, Revision 2**
Log Number:	**E983, F864, G494, 55421, 55679**
Review Type:	**Title V, RACT, Significant Revision**
Source ID #:	**21-019-00014**
Regional Office:	**Ashland Regional Office** **P.O. Box 1507** **3700 13th Street** **Ashland, KY 41105** **(606) 920-2067**
County:	**Boyd**
Application Complete Date:	**February 16, 2000**
Issuance Date:	**August 21, 2000**
Revision Date:	**March 1, 2004**
Expiration Date:	**August 21, 2005**

John S. Lyons, Director
Division for Air Quality

Revised 12/09/02

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Rev #	Permit type	Log #	Complete Date	Issuance Date	Summary of Action
----	**Initial Issuance**	**E983, F864, G494**	**02/16/00**	**08/21/00**	
1	**Minor revision**	**55421**	**01/28/03**	**07/10/03**	**Addition of temporary natural gas fired package boiler. Update permit template.**
2	**Significant Revision**	**55679, 55758**	**08/04/03**	**03/01/04**	**Reduce allowable SO2 emission rate. 502(b)10 Change.**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

INDEX OF EMISSION POINTS LISTED IN SECTION B

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

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SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A. A-LINE:

08 (A-10) A-Line Packaging operations
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the A-Line Packaging operations.

1. Operating Limitations:

The total weight of activated carbon processed at the A-Line Packaging operations shall not exceed 2.0 tons per hour and 17,520 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the A-Line Packaging operations each month.
b. Total weight of activated carbon processed at the A-Line Packaging operations during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the A-Line Packaging operations each month] ÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the A-Line Packaging operations shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

   For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

   Where E = rate of emissions in lb/hr, and

   P = process weight rate in tons/hr of activated carbon processed at the A-Line Packaging operations (i.e.: The hourly activated carbon throughput rate determined in 1.d., above).

b. The opacity of visible emissions from the A-Line Packaging operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the A-Line Packaging operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the A-Line Packaging is in operation. The permittee is required to use the baghouse associated with the A-Line Packaging operations in order meet the particulate matter emission standard for the A-Line Packaging operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A. A-LINE:

08 (A-10) A-Line Packaging operations

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor observed during last stack test* (in pounds PM/per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above.]

(*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.)

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the A-Line Packaging unit is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the A-Line Packaging unit is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the A-Line Packaging operations each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the A-Line Packaging baghouse.

d. The permittee shall visually inspect the A-Line Packaging baghouse once per week during A-Line Packaging operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

A. A-LINE:

08 (A-10) A-Line Packaging operations

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the A-Line Packaging operations each month.
b. Total hours of activated carbon processing during the month.
c. During all periods of malfunction of the baghouse, if the A-Line Packaging unit is in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse.
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the A-Line Packaging operations stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the A-Line Packaging operations baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8 of this permit:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the A-Line Packaging unit is in operation but the baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

09 (B-01) B-Line Coal and Pitch Preparation Area
B-Line Preparation Area to Baker Elevator
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the B-Line Coal and Pitch Preparation operations.

1. Operating Limitations:

The total weight of coal processed at the B-Line Coal and Pitch Preparation operations shall not exceed 9.0 tons per hour and 78,840 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of coal processed at the B-Line Coal and Pitch Preparation Area each month.
b. Total weight of coal processed at the B-Line Coal and Pitch Preparation Area during the previous 12 months.
c. Total hours of coal processing during the month.
d. Hourly coal throughput = [Total weight of coal processed at the B-Line Coal and Pitch Preparation Area each month] ÷ [Total hours of coal processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the B-Line Coal and Pitch Preparation Area shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:

   For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$

   Where E = rate of emissions in lb/hr, and

   P = process weight rate in tons/hr of coal processed at the B-Line Coal and Pitch Preparation Area (i.e.: The hourly coal throughput rate determined in 1.d., above).

b. Emissions of particulate matter from the B-Line Coal and Pitch Preparation operations shall not exceed 3.29 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the B-Line Coal and Pitch Preparation operations shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].
d. The baghouse associated with the B-Line Coal and Pitch Preparation operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the B-Line Coal and Pitch Preparation are in operation. The permittee is required to use the baghouse associated with the B-Line Coal and Pitch Preparation operations in order meet the particulate matter emission standard for the B-Line Coal and Pitch Preparation operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

09 (B-01) B-Line Coal and Pitch Preparation Area

2. Emission Limitations: (continued)
Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton coal)] ∗ [The hourly coal throughput rate determined in 1.d., above]

b. Opacity Limit:
i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.
ii. If the B-Line Coal and Pitch Preparation Area is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Coal and Pitch Preparation Area is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the following parameters:

a. Total weight of coal processed at the B-Line Coal and Pitch Preparation Area each month.
b. Total hours of coal processing during the month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the B-Line Coal and Pitch Preparation Area baghouse.
d. The permittee shall visually inspect the B-Line Coal and Pitch Preparation Area baghouse once per week during operation of the B-Line Coal and Pitch Preparation Area. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

09 (B-01) B-Line Coal and Pitch Preparation Area

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of coal processed at the B-Line Coal and Pitch Preparation Area each month.
b. Total hours of coal processing during the month.
c. During all periods of malfunction of the baghouse, if the B-Line Coal and Pitch Preparation Area is in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse.
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the A-Line Packaging operations stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the B-Line Coal and Pitch Preparation Area baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Coal and Pitch Preparation Area is in operation but the baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

11 (B-02) Two (2) B-Line Bakers with Waste Heat Boiler (51.0 mmBTU/hr)
B-Line 1st Pass Baker to B-Line 2nd Pass Baker Drag Conveyor
B-Line Baker to Activator Elevator
B-Line Baker to C-Line Activator Transfer Elevator
Urea Injection Provision for Custom Product
Controls: Afterburner (VOC)
Scrubber (PM/PM_{10}, SO_2)

APPLICABLE REGULATIONS:

a. 401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the B-Line Bakers.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the B-Line Bakers.

1. Operating Limitations:

The total weight of coal processed through the B-Line Bakers shall not exceed 7.8 tons per hour and 68,328 tons during any consecutive 12 months [Permit V-00-015].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of coal processed through the B-Line Bakers each month.
b. Total weight of coal processed through the B-Line Bakers during the previous 12 months.
c. Total hours of operation of the B-Line Bakers during the month.
d. Hourly coal throughput = [Total weight of coal processed through the B-Line Bakers each month] ÷ [Total hours of operation of the B-Line Bakers during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the B-Line Bakers shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of coal processed through the B-Line Bakers (i.e.: The hourly coal throughput rate determined in 1.d., above).
b. Emissions of particulate matter from the B-Line Bakers shall not exceed 21.46 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the B-Line Preparation Area to Baker Elevator shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].
d. Emissions of sulfur dioxide B-Line Bakers shall not exceed 8.90 lb/hr and 39.0 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

11	(B-02)	Two (2) B-Line Bakers B-Line 1st Pass Baker to B-Line 2nd Pass Baker Drag Conveyor B-Line Baker to Activator Elevator B-Line Baker to C-Line Activator Transfer Elevator Urea Injection Provision for Custom Product

2. Emission Limitations: (continued)

e. The wet scrubber associated with the B-Line Bakers shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the B-Line Bakers are in operation. The permittee is required to use the wet scrubber associated with the B-Line Bakers in order meet the applicable emission standards for particulate matter and sulfur dioxide.

f. The afterburner associated with the B-Line Bakers shall control emissions of volatile organic compounds (VOC) and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the B-Line Bakers are in operation [401 KAR 50:012, Section 1 (1)].

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM / SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM / SO_2 per ton coal)] * [The hourly coal throughput rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the B-Line Bakers are in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Wet Scrubber:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Bakers are in operation but the corresponding wet scrubber is not in operation.

d. Use of Afterburner:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Bakers are in operation but the corresponding afterburner is not in operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

11	(B-02)	Two (2) B-Line Bakers B-Line 1st Pass Baker to B-Line 2nd Pass Baker Drag Conveyor B-Line Baker to Activator Elevator B-Line Baker to C-Line Activator Transfer Elevator Urea Injection Provision for Custom Product

3. Testing Requirements:

a. See General Condition **Section G.** (d) 5.

b. Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of coal processed at the B-Line Bakers each month.

b. Total hours of operation of the B-Line Bakers during the month.

c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of the afterburner.
   ii. The scrubbing liquid pressure or flowrate to the wet scrubber.

d. The permittee shall visually inspect the B-Line Bakers scrubber once per week during operation of the B-Line Bakers. The weekly inspection shall consist of the visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of coal processed at the B-Line Bakers each month.

b. Total hours of operation of the B-Line Bakers during the month.

c. Continuous records of the following information:
   i. The temperature in the combustion chamber of the afterburner.
   ii. The scrubbing liquid pressure or flowrate to the wet scrubber.

d. During all periods of malfunction of the wet scrubber, if the B-Line Bakers are in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the B-Line Bakers wet scrubber stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

11	(B-02)	Two (2) B-Line Bakers B-Line 1st Pass Baker to B-Line 2nd Pass Baker Drag Conveyor B-Line Baker to Activator Elevator B-Line Baker to C-Line Activator Transfer Elevator Urea Injection Provision for Custom Product

5. Specific Recordkeeping Requirements: (continued)

e. All maintenance activities performed at the wet scrubber and afterburner.

f. Quantity of urea utilized during the manufacture of custom product, and the manufacturing schedule for the custom product runs.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with Section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.

b. The occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Bakers are in operation but the associated scrubber is not in operation.

7. Specific Control Equipment Operating Conditions:

For the B-Line Baker afterburner:

The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

For the B-Line Baker wet scrubber:

The wet scrubber shall be operated at a minimum total flow rate of 100 gpm of liquid to the scrubber (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average flow rate of scrubbing liquid to the scrubber was below the minimum specified.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

12 (B-08, 09) B-Line Baker Heater
Rating: 20.0 mmBTU/hr, natural gas fired
Date of construction: 1990

APPLICABLE REGULATIONS:

a. 401 KAR 59:015, *New indirect heat exchangers*, applies to the emissions of particulate matter and sulfur dioxide from the B-Line Baker Heater.
b. 401 KAR 53:005, *General provisions* was applied to this emission point in order to meet NAAQS for sulfur dioxide.

1. Operating Limitations: None.

2. Emission Limitations:

a. Emissions of particulate matter from the B-Line Baker Heater shall not exceed 0.35 lb/mmBTU [401 KAR 59:015, Section 4 (1)].
b. Emissions of sulfur dioxide from the B-Line Baker Heater shall not exceed 0.0853 lb/mmBTU [401 KAR 53:005, and Permit V-00-015 (Revision 2)].
c. The opacity of visible emissions from the B-Line Baker Heater shall not exceed 20 percent [401 KAR 59:015, Section 4 (2)] except as provided below:
   i. Pursuant to 401 KAR 59:015, Section 4(2)(b), a maximum of 40% opacity is permissible for not more than 6 consecutive minutes in any 60 consecutive minute period during cleaning the fire box or blowing soot.
   ii. Pursuant to 401 KAR 59:015, Section 4(2)(c), the opacity standard does not apply during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
   iii. Pursuant to 401 KAR 50:055, Section 2(4), the opacity standard does not apply during periods of startup and shutdown.

Compliance Demonstration Method:

Mass Emission Limits:
For particulate matter and sulfur dioxide, no compliance demonstration is necessary for the applicable emission standards (lb/mmBTU) while natural gas is the only fuel used.

Opacity Limits:
No compliance demonstration is necessary for the applicable opacity standard while natural gas is the only fuel used.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

12 (B-08, 09) B-Line Baker Heater

4. Specific Monitoring Requirements:
The permittee shall monitor the fuel consumption of natural gas at the B-Line Baker Heater.

5. Specific Recordkeeping Requirements:
The permittee shall maintain records of the fuel consumption of natural gas at the B-Line Baker Heater.

6. Specific Reporting Requirements: None.

7. Specific Control Equipment Operating Conditions: Not applicable.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

14 (B-04) 1. B-Line Activator Furnace #3
Rating: 24.0 mmBTU/hr each (24 burners)
Fuel: Natural Gas
2. Feed Bin to B-Line Activator Transfer Elevator (2)
Controls: Afterburner (VOC)
Scrubber (PM/PM_{10}, SO_2)

APPLICABLE REGULATIONS:

a. 401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the B-Line Activator.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the B-Line Activator.
c. 401 KAR 53:005, *General provisions* was applied to this emission point in order to meet NAAQS for sulfur dioxide.

1. Operating Limitations:

The total weight of carbon processed through the B-Line Activator shall not exceed 1.5 tons per hour and 13,140 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of carbon processed through the B-Line Activator each month.
b. Total weight of carbon processed through the B-Line Activator during the previous 12 months.
c. Total hours of operation of the B-Line Activator during the month.
d. Hourly carbon throughput = [Total weight of carbon processed through the B-Line Activator each month] ÷ [Total hours of operation of the B-Line Activator during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the B-Line Activator shall not exceed the allowable rate
limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of carbon processed through the B-Line Activator (i.e.: The hourly carbon throughput rate determined in 1.d., above.).

b. The opacity of visible emissions from the B-Line Activator shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. Emissions of SO_2 from the B-Line Activator shall not exceed 2.88 lbs/hr and 12.6 tons during any consecutive 12 months [401 KAR 53:005, and Permit V-00-015 (Revision 2)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

14 (B-04) B-Line Activator Furnace #3
Feed Bin to B-Line Activator Transfer Elevator (2)

2. Emission Limitations: (continued)

d. The afterburner shall control emissions of volatile organic compounds and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the B-Line Activator is in operation [401 KAR 50:012, Section 1 (1)]. The B-Line Activator is considered in operation any time carbon is being conveyed to the Activator.

e. The wet scrubber associated with the B-Line Activator shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the B-Line Activator is in operation. The permittee is required to use the wet scrubber associated with the B-Line Activator in order to maintain NAAQS emission standards for sulfur dioxide.

Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM / SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM / SO_2 per ton carbon)] ∗ [The hourly carbon throughput rate determined in 1.d., above]

b. Opacity Limit:
   i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.
   ii. If the B-Line Activator is in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Afterburner:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Activator is in operation but the corresponding afterburner is not.

d. Use of Scrubber:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Activator is in operation but the corresponding scrubber is not.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

14	(B-04)	B-Line Activator Furnace #3 Feed Bin to B-Line Activator Transfer Elevator (2)

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Amount of carbon processed through the B-Line Activator per month.
b. Hours of operation of the B-Line Activator per month.
c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. The permittee shall visually inspect the B-Line Activator scrubber once per week during operation of the B-Line Activator. The weekly inspection shall consist of the corresponding visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Amount of carbon processed through the B-Line Activator per month.
b. Hours of operation of the B-Line Activator per month.
c. Continuous records of the following information:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. During all periods of malfunction of the wet scrubber, if the B-Line Activator is in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the B-Line Activator wet scrubber stack stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
e. All maintenance activities performed at the wet scrubber and afterburner.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Activator is in operation but the associated scrubber is not in operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

14	(B-04)	B-Line Activator Furnace #3 Feed Bin to B-Line Activator Transfer Elevator (2)

7. Specific Control Equipment Operating Conditions:

For the B-Line Activator afterburner:

The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

For the B-Line Activator wet scrubber:

a. The wet scrubber shall be operated at a minimum total flow rate of 750 gpm of liquid to the scrubber (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average flow rate of scrubbing liquid to the scrubber was below the minimum specified.

b. The wet scrubber shall be operated at a minimum total differential pressure drop of 8.0 inches of water (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average pressure drop across the wet scrubber was below the minimum specified.

8. **Compliance Schedule:** See **Section I**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

15 (B-06) B-Line Packaging operations
B-Line Packaging Recycle Elevator
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the B-Line Packaging operations.

1. Operating Limitations:

The total weight of activated carbon processed at the B-Line Packaging operations shall not exceed 2.0 tons per hour and 17,520 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the B-Line Packaging operations each month.
b. Total weight of activated carbon processed at the B-Line Packaging operations during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the B-Line Packaging operations each month] ÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the B-Line Packaging operations shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of activated carbon processed at the B-Line Packaging operations (i.e.: The hourly activated carbon throughput rate determined in 1.d., above.).

b. The opacity of visible emissions from the B-Line Packaging operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the B-Line Packaging operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the B-Line Packaging is in operation. The permittee is required to use the baghouse associated with the B-Line Packaging operations in order meet the particulate matter emission standard for the B-Line Packaging operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

15 (B-06) B-Line Packaging operations
B-Line Packaging Recycle Elevator

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the B-Line Packaging unit is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Packaging unit is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the B-Line Packaging operations each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the B-Line Packaging baghouse.

d. The permittee shall visually inspect the B-Line Packaging baghouse once per week during B-Line Packaging operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

B. B-LINE:

15	(B-06)	B-Line Packaging operations B-Line Packaging Recycle Elevator

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the B-Line Packaging operations each month.
b. Total hours of activated carbon processing during the month.
c. During all periods of malfunction of the baghouse, if the B-Line Packaging operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for B-Line Packaging operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification
d. For the B-Line Packaging operations, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.
f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the B-Line Packaging operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

21 (C-04, 05)

1. C-Line Activator Furnaces #5 & #6
   Rating: 24.0 mmBTU/hr each (24 burners)
   Fuel: Natural Gas
   Controls: Afterburner (VOC)
   Scrubber (PM/PM_{10}, SO_2)
2. Feed Bin to C-Line Activator Transfer Elevators (4)

APPLICABLE REGULATIONS:

a. 401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the C-Line Activators.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the C-Line Activators.
c. 401 KAR 53:005, *General provisions,* was applied to this emission point in order to meet NAAQS for sulfur dioxide.

1. Operating Limitations:

The total weight of carbon processed through *each* individual C-Line Activator shall not exceed 2.0 tons per hour and 17,520 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of carbon processed through the C-Line Activators each month.
b. Total weight of carbon processed through the C-Line Activators during the previous 12 months.
c. Total hours of operation of the C-Line Activators during the month.
d. Hourly carbon throughput = [Total weight of carbon processed through the C-Line Activators each month] ÷ [Total hours of operation of the C-Line Activators during the month]

2. Emission Limitations:

a. Emissions of particulate matter from *each* individual C-Line Activator shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of carbon processed through *each* individual C-Line Activator (i.e.: The hourly carbon throughput rate determined in 1.d., above).

b. The opacity of visible emissions from *each* C-Line Activator shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. Emissions of sulfur dioxide from *both* C-Line Activators combined shall not exceed 7.72 lbs/hr and 33.8 tons during any consecutive 12 months [401 KAR 53:005, and Permit V-00-015 (Revision 2)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

21 (C-04, 05) C-Line Activators Furnaces #5 & #6
Feed Bin to C-Line Activator Transfer Elevators (4)

2. Emission Limitations: (continued)

d. The afterburner shall control emissions of volatile organic compounds and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the C-Line Activators are in operation [401 KAR 50:012, Section 1 (1)]. The C-Line Activators are considered in operation any time carbon is being conveyed to the Activators.

e. The wet scrubber associated with the C-Line Activators shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the C-Line Activators are in operation. The permittee is required to use the wet scrubber associated with the C-Line Activators in order to maintain NAAQS emission standards for sulfur dioxide.

Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM / SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM / SO_2 per ton carbon)] ∗ [The hourly carbon throughput rate determined in 1.d., above]

b. Opacity Limit:
   i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.
   ii. If the C-Line Activator is in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Afterburner:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the C-Line Activators are in operation but the corresponding afterburner is not.

d. Use of Scrubber:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the C-Line Activator is in operation but the corresponding scrubber is not.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

21	(C-04, 05)	C-Line Activators Furnaces #5 & #6 Feed Bin to C-Line Activator Transfer Elevators (4)

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Amount of carbon processed through the C-Line Activators per month.
b. Hours of operation of the C-Line Activators per month.
c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. The permittee shall visually inspect the C-Line Activator scrubber once per week during operation of the C-Line Activators. The weekly inspection shall consist of the visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Amount of carbon processed through the C-Line Activators per month.
b. Hours of operation of the C-Line Activators per month.
c. Continuous records of the following information:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. During all periods of malfunction of the wet scrubber, if the C-Line Activators are in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the C-Line Activator wet scrubber stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
e. All maintenance activities performed at the wet scrubber and afterburner.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

21	(C-04, 05)	C-Line Activators Furnaces #5 & #6 Feed Bin to C-Line Activator Transfer Elevators (4)

6. **Specific Reporting Requirements:**
The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:
   a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
   b. The occurrence, duration, cause, and any corrective action taken for each incident when the C-Line Activators are in operation but the associated scrubber is not in operation.

7. Specific Control Equipment Operating Conditions:
For the C-Line Activators afterburner:
The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

For the C-Line Activator wet scrubber:
   a. The wet scrubber shall be operated at a minimum total flow rate of 1200 gpm of liquid to the scrubber (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average flow rate of scrubbing liquid to the scrubber was below the minimum specified.
   b. The wet scrubber shall be operated at a minimum total differential pressure drop of 8.0 inches of water (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average pressure drop across the wet scrubber was below the minimum specified.

8. Compliance Schedule: See **Section I**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

22 (C-06)
1. C-Line Packaging operations
2. Baker to Activator Discharge Elevator (*formerly from Baker #6, retained as dump-back elevator for totes*)

Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the C-Line Packaging operations.

1. Operating Limitations:

The total weight of activated carbon processed at the C-Line Packaging operations shall not exceed 4.0 tons per hour and 35,040 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the C-Line Packaging operations each month.
b. Total weight of activated carbon processed at the C-Line Packaging operations during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the C-Line Packaging operations each month] ÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the C-Line Packaging operations shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of activated carbon processed at the C-Line Packaging operations (i.e.: The hourly activated carbon throughput rate determined in 1.d., above).

b. The opacity of visible emissions from the C-Line Packaging operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the C-Line Packaging operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the C-Line Packaging is in operation. The permittee is required to use the baghouse associated with the C-Line Packaging operations in order meet the particulate matter emission standard for the C-Line Packaging operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

22 (C-06)
1. C-Line Packaging operations
2. Baker to Activator Discharge Elevator

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the C-Line Packaging unit is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the C-Line Packaging unit is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the C-Line Packaging operations each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the C-Line Packaging baghouse.

d. The permittee shall visually inspect the C-Line Packaging baghouse once per week during C-Line Packaging operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

C. C-LINE:

22 (C-06)
1. C-Line Packaging operations
2. Baker to Activator Discharge Elevator

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the C-Line Packaging operations each month.
b. Total hours of activated carbon processing during the month.
c. During all periods of malfunction of the baghouse, if the C-Line Packaging operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for C-Line Packaging operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification
d. For the C-Line Packaging operations baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.
f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the C-Line Packaging operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

25 (M-03) Acid Wash Transfer and Packaging System
Controls: Baghouse (PM/PM_{10})

The Acid Wash Transfer and Packaging System consists of the following equipment that is vented to the baghouse:
- Acid Wash Product Cooler Elevator
- Screener
- On-size Elevator
- Eight Product Bins
- Two Packaging Machines
- Two Dedusters
- Vibratory Conveyor
- Three Charge Bins

APPLICABLE REGULATIONS:
401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the Acid Wash Transfer and Packaging System.

1. **Operating Limitations:** None.

2. **Emission Limitations:**
   a. Emissions of particulate matter from the Acid Wash Transfer and Packaging System shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
      For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
      Where E = rate of emissions in lb/hr, and
      P = process weight rate in tons/hr of activated carbon processed at the Acid Wash Transfer and Packaging System (i.e.: [Amount of activated carbon processed at the Acid Wash Transfer and Packaging System per month] ÷ [Total hours of activated carbon processing during the month]).
   b. Emissions of particulate matter from the Acid Wash Transfer and Packaging System shall not exceed 5.26 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
   c. The opacity of visible emissions from the Acid Wash Transfer and Packaging System shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].
   d. The baghouse associated with the Acid Wash Transfer and Packaging System shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Acid Wash Transfer and Packaging System is in operation. The permittee is required to use the baghouse associated with the Acid Wash Transfer and Packaging System in order meet the particulate matter emission standard for the Acid Wash Transfer and Packaging System.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

25 (M-03) Acid Wash Transfer and Packaging System

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton activated carbon)] * [The process weight rate determined in 2.a., above]

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the Acid Wash Transfer and Packaging System is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Acid Wash Transfer and Packaging System is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the Acid Wash Transfer and Packaging System each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Acid Wash Transfer and Packaging System baghouse.

d. The permittee shall visually inspect the Acid Wash Transfer and Packaging System baghouse once per week during operation of the Acid Wash Transfer and Packaging System. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the Acid Wash Transfer and Packaging System each month.

b. Total hours of activated carbon processing during the month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

25 (M-03) Acid Wash Transfer and Packaging System

5. Specific Recordkeeping Requirements: (continued)

c. During all periods of malfunction of the baghouse, if Acid Wash Transfer and Packaging System operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Acid Wash Transfer and Packaging System operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

d. For the Acid Wash Transfer and Packaging System, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.

e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.

b. The occurrence, duration, cause, and any corrective action taken for each incident when Acid Wash Transfer and Packaging System operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

26 (M-04) 1. Acid Wash Process
2. E-Line to Acid Wash Process Transfer Conveyor
Controls: Baghouse (PM/PM_{10})

The Acid Wash Process consists of the following equipment that is vented to the baghouse:

- Natural gas fired Rotary Dryer (15.0 mmBTU/hr)
- Five (5) Acid Wash Reactors
- Two (2) Batch Dewatering Bins
- Two (2) Dryer Feed Bins

APPLICABLE REGULATIONS:

a. 401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the Acid Wash Process.
b. 401 KAR 53:005, *General provisions,* was applied to this emission point in order to meet NAAQS.

1. Operating Limitations:

The total weight of activated carbon processed at the Acid Wash Process shall not exceed 4.0 tons per hour and 35,040 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the Acid Wash Process each month.
b. Total weight of activated carbon processed at the Acid Wash Process during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the Acid Wash Process each month]÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the Acid Wash Process shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
   For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
   Where E = rate of emissions in lb/hr, and
   P = process weight rate in tons/hr of activated carbon processed at the Acid Wash Process (i.e.: The hourly activated carbon throughput rate determined in 1.d., above).
b. Emissions of SO_2 from the Acid Wash Process shall not exceed 1.278 lb/hr and 5.598 tons during any consecutive 12 months [401 KAR 53:005, and Permit V-00-015 (Revision 2)].
c. Emissions of particulate matter from the Acid Wash Process shall not exceed 7.88 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

26	(M-04)	1.	Acid Wash Process
		2.	E-Line to Acid Wash Process Transfer Conveyor

2. Emission Limitations: (continued)

d. The opacity of visible emissions from the Acid Wash Process shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].

e. The baghouse associated with the Acid Wash Process shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Acid Wash Process is in operation. The permittee is required to use the baghouse associated with the Acid Wash Process in order meet the particulate matter emission standard for the Acid Wash Process.

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM/SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM/SO_2 per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the Acid Wash Process is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Acid Wash Process is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the Acid Wash Process each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Acid Wash Process baghouse.

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

26 (M-04) 1. Acid Wash Process
2. E-Line to Acid Wash Process Transfer Conveyor

4. Specific Monitoring Requirements: (continued)

d. The permittee shall visually inspect the Acid Wash Process baghouse once per week during Acid Wash Process operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the Acid Wash Process each month.
b. Total hours of activated carbon processing during the month.
c. During all periods of malfunction of the baghouse, if Acid Wash Process operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Acid Wash Process operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the Acid Wash Process, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when Acid Wash Process operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

27 (--) Lime Storage Silo - equipped with bin vent

APPLICABLE REGULATIONS:
401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the Lime Storage Silo.

1. **Operating Limitations:** None.

2. **Emission Limitations:**
   a. Emissions of particulate matter from the Lime Storage Silo shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
      For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
      Where E = rate of emissions in lb/hr, and
      P = process weight rate in tons/hr of lime loaded into the Lime Storage Silo (i.e.: [Amount of lime loaded into the Lime Storage Silo per month] ÷ [Total hours of lime loading during the month]).
   b. Emissions of particulate matter from the Lime Storage Silo shall not exceed 1.86 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
   c. The opacity of visible emissions from the Lime Storage Silo shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].

   Compliance Demonstration Method:
   a. Mass Emission Standard:
      Actual PM Emission Rate = [Emission factor estimated using credible engineering judgement based on conservative assumptions (in pounds PM/per ton lime)] ∗ [The process weight rate determined in 2.a., above]
   b. Opacity Limit:
      Compliance with the opacity limit will be determined by paragraphs 4.c. and 5.c. below.

3. **Testing Requirements:**
   Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**
   The permittee shall monitor the following parameters:
   a. Amount of lime loaded into the Lime Storage Silo per month.
   b. Hours of loading at the Lime Storage Silo per month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

27 (--) Lime Storage Silo - equipped with bin vent

4. Specific Monitoring Requirements: (continued)

c. The permittee shall visually inspect the Lime Storage Silo once per week. The weekly inspection shall consist of:
   i. A visual inspection of the physical condition of the Lime Storage Silo;
   ii. Whether any air emissions were visible from the Lime Storage Silo;
   iii. Whether the visible emissions were normal for the Lime Storage Silo;
   iv. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Lime Storage Silo. The opacity observed shall be recorded in a log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Amount of lime loaded into the Lime Storage Silo per month.
b. Hours of loading for the Lime Storage Silo per month.
c. Findings of the weekly visual inspection and any corrective actions taken as a result.
d. The emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8 for any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

29 (D-04) 1. D-Line Coal and Pitch Preparation Area
2. D-Line Preparation Area to Baker Elevator
3. D-Line and E-Line Preparation Area Transfer Elevator
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the D-Line Coal and Pitch Preparation operations.

1. Operating Limitations:
The total weight of coal processed at the D-Line Coal and Pitch Preparation operations shall not exceed 9.0 tons per hour and 61,500 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:
The permittee shall maintain monthly records of the following information:
a. Total weight of coal processed at the D-Line Coal and Pitch Preparation Area each month.
b. Total weight of coal processed at the D-Line Coal and Pitch Preparation Area during the previous 12 months.
c. Total hours of coal processing during the month.
d. Hourly coal throughput = [Total weight of coal processed at the D-Line Coal and Pitch Preparation Area each month] ÷ [Total hours of coal processing during the month]

2. Emission Limitations:
a. Emissions of particulate matter from the D-Line Coal and Pitch Preparation operations shall
not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of coal processed at the D-Line Coal and Pitch Preparation operations (i.e.: The hourly coal throughput rate determined in 1.d., above).
b. Emissions of particulate matter from the D-Line Coal and Pitch Preparation operations shall not exceed 61.06 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the D-Line Coal and Pitch Preparation operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
d. The baghouse associated with the D-Line Coal and Pitch Preparation operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D-Line Coal and Pitch Preparation are in operation. The permittee is required to use the baghouse associated with the D-Line Coal and Pitch Preparation operations in order meet the particulate matter emission standard for the D-Line Coal and Pitch Preparation operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

29	(D-04)	1.	D-Line Coal and Pitch Preparation Area
		2.	D-Line Preparation Area to Baker Elevator
		3.	D-Line and E-Line Preparation Area Transfer Elevator

2. Emission Limitations: (continued)
Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton coal)] * [The hourly coal throughput rate determined in 1.d., above]

b. Opacity Limit:
i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.
ii. If the D-Line Coal and Pitch Preparation Area is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Coal and Pitch Preparation Area is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the following parameters:
a. Total weight of coal processed at the D-Line Coal and Pitch Preparation Area each month.
b. Total hours of coal processing during the month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the D-Line Coal and Pitch Preparation Area baghouse.
d. The permittee shall visually inspect the D-Line Coal and Pitch Preparation Area baghouse once per week during D-Line Coal and Pitch Preparation Area operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

29 (D-04)
1. D-Line Coal and Pitch Preparation Area
2. D-Line Preparation Area to Baker Elevator
3. D-Line and E-Line Preparation Area Transfer Elevator

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of coal processed at the D-Line Coal and Pitch Preparation Area each month.
b. Total hours of coal processing during the month.
c. During all periods of malfunction of the baghouse, if the D-Line Coal and Pitch Preparation Area operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the D-Line Coal and Pitch Preparation Area operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the D-Line Coal and Pitch Preparation Area baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8 of this permit:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Coal and Pitch Preparation Area operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

31 (D-05)

1. Two (2) D-Line Bakers
   Controls: Afterburner (VOC), natural gas fired (40 mmBTU/hr)
   Scrubber (PM/PM_{10}, SO_2)
2. D-Line 1st Pass Baker to D-Line 2nd Pass Baker Drag Conveyor
3. D-Line Baker to Activators Elevator
4. Urea Injection Provision for Custom Product

APPLICABLE REGULATIONS:

a. 401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the D-Line Bakers.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the D-Line Bakers.

1. Operating Limitations:

The total weight of coal processed through the D-Line Bakers shall not exceed 9.24 tons per hour and 68,328 tons during any consecutive 12 months [Hourly limit: 502(b)(10) Change, V-00-015 (Revision 2). Annual limit: Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of coal processed through the D-Line Bakers each month.
b. Total weight of coal processed through the D-Line Bakers during the previous 12 months.
c. Total hours of operation of the D-Line Bakers during the month.
d. Hourly coal throughput = [Total weight of coal processed through the D-Line Bakers each month] ÷ [Total hours of operation of the D-Line Bakers during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the D-Line Bakers shall not exceed the allowable rate
limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of coal processed through the D-Line Bakers (i.e.: The hourly coal throughput rate determined in 1.d., above).

b. The opacity of visible emissions from the D-Line Preparation Area to Baker Elevator shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. Emissions of sulfur dioxide from the D-Line Bakers shall not exceed 15.0 lb/hr and 65.7 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

31 (D-05) Two (2) D-Line Bakers

2. Emission Limitations: (continued)

d. The wet scrubber associated with the D-Line Bakers shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D-Line Bakers are in operation. The permittee is required to use the wet scrubber associated with the D-Line Bakers in order meet the applicable emission standards for particulate matter and sulfur dioxide.

e. The afterburner associated with the D-Line Bakers shall control emissions of volatile organic compounds (VOC) and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D-Line Bakers are in operation [401 KAR 50:012, Section 1 (1)].

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM/SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM/SO_2 per ton coal)] * [The hourly coal throughput rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary.

ii. If the D-Line Bakers are in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Wet Scrubber:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Bakers are in operation but the corresponding wet scrubber is not in operation.

d. Use of Afterburner:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Bakers are in operation but the corresponding afterburner is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

31 (D-05) Two (2) D-Line Bakers

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of coal processed at the D-Line Bakers each month.
b. Total hours of operation of the D-Line Bakers during the month.
c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. The permittee shall visually inspect the D-Line Baker scrubber once per week during operation of the D-Line Bakers. The weekly inspection shall consist of the visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of coal processed at the D-Line Bakers each month.
b. Total hours of operation of the D-Line Bakers during the month.
c. Continuous records of the following information:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. During all periods of malfunction of the wet scrubber, if the D-Line Bakers are in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the D-Line Baker wet scrubber stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
e. All maintenance activities performed at the wet scrubber and afterburner.
f. Quantity of urea utilized during the manufacture of custom product, and the manufacturing schedule for custom product runs.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Bakers are in operation but the associated scrubber is not in operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

31 (D-05) Two (2) D-Line Bakers

7. Specific Control Equipment Operating Conditions:

For each D-Line Baker afterburner:

The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

32	(D-12, 13)	D-Line Baker Heaters Rating:20.0 mmBTU/hr, natural gas fired Date of construction:1990

APPLICABLE REGULATIONS:

a. 401 KAR 59:015, *New indirect heat exchangers*, applies to the emissions of particulate matter and sulfur dioxide from the D-Line Baker Heater.
b. 401 KAR 53:005, *General provisions,* was applied to this emission point in order to meet NAAQS.

1. Operating Limitations: None.

2. Emission Limitations:

a. Emissions of particulate matter from the D-Line Baker Heater shall not exceed 0.35 lb/mmBTU [401 KAR 59:015, Section 4 (1)].
b. Emissions of sulfur dioxide from the D-Line Baker Heater shall not exceed 0.0853 lb/mmBTU [401 KAR 53:005, and Permit V-00-015 (Revision 2)].
c. The opacity of visible emissions from the D-Line Baker Heater shall not exceed 20 percent [401 KAR 59:015, Section 4 (2)] except as provided below:
   i. Pursuant to 401 KAR 59:015, Section 4(2)(b), a maximum of 40% opacity is permissible for not more than 6 consecutive minutes in any 60 consecutive minute period during cleaning the fire box or blowing soot.
   ii. Pursuant to 401 KAR 59:015, Section 4(2)(c), the opacity standard does not apply during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
   iii. Pursuant to 401 KAR 50:055, Section 2(4), the opacity standard does not apply during periods of startup and shutdown.

Compliance Demonstration Method:

Mass Emission Limits:

For particulate matter and sulfur dioxide, no compliance demonstration is necessary for the applicable emission standards (lb/mmBTU) while natural gas is the only fuel used.

Opacity Limits:

No compliance demonstration is necessary for the applicable opacity standard while natural gas is the only fuel used.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

32 (D-12, 13) D-Line Baker Heaters

4. Specific Monitoring Requirements:
The permittee shall monitor the fuel consumption of natural gas at the D-Line Baker Heater.

5. Specific Recordkeeping Requirements:
The permittee shall maintain records of the fuel consumption of natural gas at the D-Line Baker Heater.

6. Specific Reporting Requirements: None.

7. Specific Control Equipment Operating Conditions: Not applicable.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

34 (D-08, 09)

1. D-Line Activator Furnaces #7 & #8
   Rating: 30.0 mmBTU/hr each (14 burners)
   Fuel: Natural Gas
   Controls: Afterburner (VOC), natural gas fired (40 mmBTU/hr)
   Scrubber + Spray Tower (PM/PM_{10}, SO_2)
2. Feed Bin to D-Line Activator Transfer Elevators (2)

APPLICABLE REGULATIONS:

a. 401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the D-Line Activators.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the D-Line Activators.

1. Operating Limitations:

The total weight of carbon processed through *each* D-Line Activator shall not exceed 4.05 tons per hour and 35,478 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of carbon processed through the D-Line Activators each month.
b. Total weight of carbon processed through the D-Line Activators during the previous 12 months.
c. Total hours of operation of the D-Line Activators during the month.
d. Hourly carbon throughput = [Total weight of carbon processed through the D-Line Activators each month] ÷ [Total hours of operation of the D-Line Activators during the month]

2. Emission Limitations:

a. Emissions of particulate matter from *each* individual D-Line Activator shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of carbon processed through *each* individual D-Line Activator (i.e.: The hourly carbon throughput rate determined in 1.d., above).

b. Emissions of particulate matter from *each* D-Line Activator shall not exceed 32.85 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from *each* D-Line Activator shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
d. Emissions of sulfur dioxide from both D-Line Activators combined shall not exceed 15 lbs/hr and 65.7 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

34 (D-08, 09) 1. D-Line Activator Furnaces #7 & #8
2. Feed Bin to D-Line Activator Transfer Elevators (2)

2. Emission Limitations: (continued)

e. The afterburner shall control emissions of volatile organic compounds and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D-Line Activators is in operation [401 KAR 50:012, Section 1 (1)]. The D-Line Activators is considered in operation any time carbon is being conveyed to the Activators.

f. The wet scrubber associated with the D-Line Activators shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D-Line Activators are in operation. The permittee is required to use the wet scrubber associated with the D-Line Activators in order meet the applicable emission standards for particulate matter and sulfur dioxide.

Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM/SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM/SO_2 per ton carbon)] * [The hourly carbon throughput rate determined in 1.d., above]

b. Opacity Limit:
i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.
ii. If the D-Line Activators are in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Afterburner:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Activators is in operation but the corresponding afterburner is not.

d. Use of Scrubber:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Activators are in operation but the corresponding scrubber is not.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

34 (D-08, 09)
1. D-Line Activator Furnaces #7 & #8
2. Feed Bin to D-Line Activator Transfer Elevators (2)

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Amount of carbon processed through the D-Line Activators per month.
b. Hours of operation of the D-Line Activators per month.
c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iv. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. The permittee shall visually inspect the D-Line Activator scrubber once per week during operation of the D-Line Activators. The weekly inspection shall consist of the corresponding visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Amount of carbon processed through the D-Line Activators per month.
b. Hours of operation of the D-Line Activators per month.
c. Continuous records of the following information:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. During all periods of malfunction of the wet scrubber, if the D-Line Activators are in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the D-Line Activator wet scrubber stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. All maintenance activities performed at the wet scrubber and afterburner.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

34 (D-08, 09)
1. D-Line Activator Furnaces #7 & #8
2. Feed Bin to D-Line Activator Transfer Elevators (2)

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Activators are in operation but the associated scrubber is not in operation.

7. Specific Control Equipment Operating Conditions:

For each D-Line Activators afterburner:

The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

For each D-Line Activators wet scrubber:

a. The wet scrubber shall be operated at a minimum total flow rate of 350 gpm of liquid to the scrubber (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average flow rate of scrubbing liquid to the scrubber was below the minimum specified.
b. The wet scrubber shall be operated at a minimum total differential pressure drop of 6.0 inches of water (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average pressure drop across the wet scrubber was below the minimum specified.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

35 (D-10) D-Line Packaging operations
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the D-Line Packaging operations.

1. Operating Limitations:

The total weight of activated carbon processed at the D-Line Packaging operations shall not exceed 5.0 tons per hour and 43,800 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the D-Line Packaging operations each month.
b. Total weight of activated carbon processed at the D-Line Packaging operations during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the D-Line Packaging operations each month] ÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the D-Line Packaging operations shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of activated carbon processed at the D-Line Packaging operations (i.e.: The hourly activated carbon throughput rate determined in 1.d., above).

b. The opacity of visible emissions from the D-Line Packaging operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the D-Line Packaging operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D-Line Packaging is in operation. The permittee is required to use the baghouse associated with the D-Line Packaging operations in order meet the particulate matter emission standard for the D-Line Packaging operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

35 (D-10) D-Line Packaging operations

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the D-Line Packaging is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Packaging is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the D-Line Packaging operations each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the D-Line Packaging baghouse.

d. The permittee shall visually inspect the D-Line Packaging baghouse once per week during D-Line Packaging operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

D. D-LINE:

35 (D-10) D-Line Packaging operations

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the D-Line Packaging operations each month.
b. Total hours of activated carbon processing during the month.
c. During all periods of malfunction of the baghouse, if the D-Line Packaging operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the D-Line Packaging operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the D-Line Packaging operations, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.
f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the D-Line Packaging operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

37 (E-01) 1. E-Line Coal and Pitch Preparation Area
2. E-Line Preparation Area to Baker Elevator
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the E-Line Coal and Pitch Preparation operations.

1. Operating Limitations:

The total weight of coal processed at the E-Line Coal and Pitch Preparation operations shall not exceed 9.0 tons per hour and 61,500 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of coal processed at the E-Line Coal and Pitch Preparation Area each month.
b. Total weight of coal processed at the E-Line Coal and Pitch Preparation Area during the previous 12 months.
c. Total hours of coal processing during the month.
d. Hourly coal throughput = [Total weight of coal processed at the E-Line Coal and Pitch Preparation Area each month] ÷ [Total hours of coal processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the E-Line Coal and Pitch Preparation operations shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of coal processed at the E-Line Coal and Pitch Preparation operations (i.e.: The hourly coal throughput rate determined in 1.d., above).

b. Emissions of particulate matter from the E-Line Coal and Pitch Preparation operations shall not exceed 61.06 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the E-Line Coal and Pitch Preparation operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
d. The baghouse associated with the E-Line Coal and Pitch Preparation operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the E-Line Coal and Pitch Preparation are in operation. The permittee is required to use the baghouse associated with the E-Line Coal and Pitch Preparation operations in order meet the particulate matter emission standard for the E-Line Coal and Pitch Preparation operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

37	(E-01)	1. E-Line Coal and Pitch Preparation Area 2. E-Line Preparation Area to Baker Elevator

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton coal)] * [The hourly coal throughput rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the E-Line Coal and Pitch Preparation Area is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Coal and Pitch Preparation Area is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of coal processed at the E-Line Coal and Pitch Preparation Area each month.

b. Total hours of coal processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the E-Line Coal and Pitch Preparation Area baghouse.

d. The permittee shall visually inspect the E-Line Coal and Pitch Preparation Area baghouse once per week during E-Line Coal and Pitch Preparation Area operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

37 (E-01) 1. E-Line Coal and Pitch Preparation Area
2. E-Line Preparation Area to Baker Elevator

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of coal processed at the E-Line Coal and Pitch Preparation Area each month.
b. Total hours of coal processing during the month.
c. During all periods of malfunction of the baghouse, if the E-Line Coal and Pitch Preparation Area operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for E-Line Coal and Pitch Preparation Area operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the E-Line Coal and Pitch Preparation Area baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Coal and Pitch Preparation Area operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

39 (E-02)

1. Two (2) E-Line Bakers
   Controls: Afterburner (VOC), natural gas fired (40 mmBTU/hr)
   Scrubber (PM/PM_{10}, SO_2)
2. E-Line 1st Pass Baker to E-Line 2nd Pass Baker Transfer Elevator
3. E-Line Baker to Activators Elevators
4. Urea Injection Provision for Custom Product

APPLICABLE REGULATIONS:

a. 401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the E-Line Bakers.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the E-Line Bakers.
c. 401 KAR 53:005, *General provisions* was, applied to this emission point in order to meet NAAQS for sulfur dioxide.

1. Operating Limitations:

The total weight of coal processed through the E-Line Bakers shall not exceed 7.8 tons per hour and 68,328 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of coal processed through the E-Line Bakers each month.
b. Total weight of coal processed through the E-Line Bakers during the previous 12 months.
c. Total hours of operation of the E-Line Bakers during the month.
d. Hourly coal throughput = [Total weight of coal processed through the E-Line Bakers each month] ÷ [Total hours of operation of the E-Line Bakers during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the E-Line Bakers shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
   For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
   Where E = rate of emissions in lb/hr, and
   P = process weight rate in tons/hr of coal processed through the E-Line Bakers (i.e.: The hourly coal throughput rate determined in 1.d., above).
b. The opacity of visible emissions from the E-Line Preparation Area to Baker Elevator shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].
c. Emissions of sulfur dioxide from the E-Line Bakers shall not exceed 15.0 lb/hr and 65.7 tons during any consecutive 12 months [401 KAR 53:005, and Permit V-00-015 (Revision 2)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

39 (E-02)
1. Two (2) E-Line Bakers
2. E-Line 1st Pass Baker to E-Line 2nd Pass Baker Transfer Elevator
3. E-Line Baker to Activators Elevators
4. Urea Injection Provision for Custom Product

2. Emission Limitations: (continued)

d. The wet scrubber associated with the E-Line Bakers shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the E-Line Bakers are in operation. The permittee is required to use the wet scrubber associated with the E-Line Bakers in order meet the applicable emission standards for particulate matter and sulfur dioxide.

e. The afterburner associated with the E-Line Bakers shall control emissions of volatile organic compounds (VOC) and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the E-Line Bakers are in operation [401 KAR 50:012, Section 1 (1)].

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM/SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM/SO_2 per ton coal)] * [The hourly coal throughput rate determined in 1.d., above]

b. Opacity Limit:
   i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary.
   ii. If the E-Line Bakers are in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Wet Scrubber:
   The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Bakers are in operation but the corresponding wet scrubber is not in operation.

d. Use of Afterburner:
   The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Bakers are in operation but the corresponding afterburner are not in operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

39	(E-02)	1. Two (2) E-Line Bakers 2. E-Line 1st Pass Baker to E-Line 2nd Pass Baker Transfer Elevator 3. E-Line Baker to Activators Elevators 4. Urea Injection Provision for Custom Product

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of coal processed at the E-Line Bakers each month.
b. Total hours of operation of the E-Line Bakers during the month.
c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. The permittee shall visually inspect the E-Line Baker scrubber once per week during operation of the E-Line Bakers. The weekly inspection shall consist of the corresponding visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of coal processed at the E-Line Bakers each month.
b. Total hours of operation of the E-Line Bakers during the month.
c. Continuous records of the following information:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. During all periods of malfunction of the wet scrubber, if the D-Line Bakers are in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the D-Line Baker wet scrubber stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

39 (E-02)
1. Two (2) E-Line Bakers
2. E-Line 1st Pass Baker to E-Line 2nd Pass Baker Transfer Elevator
3. E-Line Baker to Activators Elevators
4. Urea Injection Provision for Custom Product

5. Specific Recordkeeping Requirements: (continued)

e. All maintenance activities performed at the wet scrubber and afterburner.
f. Quantity of urea utilized during the manufacture of custom product, and the manufacturing schedule of custom product runs.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Bakers are in operation but the associated scrubber is not in operation.

7. Specific Control Equipment Operating Conditions:

For each E-Line Baker afterburner:

The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

For each wet scrubber:

The wet scrubber shall be operated at a minimum total flow rate of 100 gpm of liquid to the fan (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average flow rate of scrubbing liquid to the scrubber was below the minimum specified.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

40	(E-09, 10)	E-Line Baker Heaters Rating: 16.7 mmBTU/hr Fuels: Natural gas, fuel oil #2 Date of construction: 1990

APPLICABLE REGULATIONS:

a. 401 KAR 59:015, *New indirect heat exchangers*, applies to the emissions of particulate matter and sulfur dioxide from the E-Line Baker Heater.
b. 401 KAR 53:005, *General provisions* was, applied to this emission point in order to meet NAAQS for sulfur dioxide.

1. **Operating Limitations:** The heat-input rating will be accomplished through the removal of five (5) #2 fuel oil fired burners. This results in the permitted operation of twenty-one (21) oil fired burners and four (4) natural gas fired burners for the E-Line Baker Heaters [Revision Application Log # 55679, & 401 KAR 53:005].

2. **Emission Limitations:**
   a. Emissions of particulate matter from the E-Line Baker Heater shall not exceed 0.35 lb/mmBTU [401 KAR 59:015, Section 4 (1)].
   b. Emissions of sulfur dioxide from the E-Line Baker Heater shall not exceed 0.477 lb/mmBTU [401 KAR 53:005, and Permit V-00-015 (Revision 2)].
   c. The opacity of visible emissions from the E-Line Baker Heater shall not exceed 20 percent [401 KAR 59:015, Section 4 (2)] except as provided below:
      i. Pursuant to 401 KAR 59:015, Section 4(2)(b), a maximum of 40% opacity is permissible for not more than 6 consecutive minutes in any 60 consecutive minute period during cleaning the fire box or blowing soot.
      ii. Pursuant to 401 KAR 59:015, Section 4(2)(c), the opacity standard does not apply during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
      iii. Pursuant to 401 KAR 50:055, Section 2(4), the opacity standard does not apply during periods of startup and shutdown.

Compliance Demonstration Method:

Mass Emission Limits:

For particulate matter and sulfur dioxide, no compliance demonstration is necessary for the applicable emission standards (lb/mmBTU) while natural gas and fuel oil #2 are the only fuels used.

Opacity Limits:

No compliance demonstration is necessary for the applicable opacity standard while natural gas and fuel oil #2 are the only fuels used.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

40 (E-09, 10) E-Line Baker Heaters

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the fuel consumption at the E-Line Baker Heaters.

5. Specific Recordkeeping Requirements:
The permittee shall maintain records of the fuel consumption of natural gas at the E-Line Baker Heaters.

6. Specific Reporting Requirements: None.

7. Specific Control Equipment Operating Conditions: Not applicable.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

42 (E-05, 06)

1. Two (2) E-Line Activator Furnaces #9 & #10
   Rating: 38.0 mmBTU/hr each (18 burners)
   Fuel: Natural Gas
   Controls: Afterburner (VOC), natural gas fired (40 mmBTU/hr)
   Scrubber + Spray Tower (PM/PM_{10}, SO_2)
2. Feed Bin to E-Line Activator Transfer Elevators (2)

APPLICABLE REGULATIONS:

a. 401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the E-Line Activators.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the E-Line Activators.
c. 401 KAR 53:005, *General provisions,* was applied to this emission point in order to meet NAAQS.

1. Operating Limitations:

The total weight of carbon processed through *each* E-Line Activator shall not exceed 4.05 tons per hour and 35,478 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of carbon processed through the E-Line Activators each month.
b. Total weight of carbon processed through the E-Line Activators during the previous 12 months.
c. Total hours of operation of the E-Line Activators during the month.
d. Hourly carbon throughput = [Total weight of carbon processed through the E-Line Activators each month] ÷ [Total hours of operation of the E-Line Activators during the month]

2. Emission Limitations:

a. Emissions of particulate matter from *each* E-Line Activator shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
   For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
   Where E = rate of emissions in lb/hr, and
   P = process weight rate in tons/hr of carbon processed through *each* E-Line Activator (i.e.: The hourly carbon throughput rate determined in 1.d., above).
b. Emissions of particulate matter from *each* E-Line Activator shall not exceed 30.44 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. Emissions of SO_2 from *each* E-Line Activator shall not exceed 7.5 lb/hr and 32.85 tons during any consecutive 12 months [401 KAR 53:005, and Permit V-00-015 (Revision 2)].
d. The opacity of visible emissions from *each* E-Line Activator shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

42 (E-05, 06) Two (2) E-Line Activator Furnaces

2. Emission Limitations: (continued)

e. The afterburner shall control emissions of volatile organic compounds and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the E-Line Activators is in operation [401 KAR 50:012, Section 1 (1)]. The E-Line Activators is considered in operation any time carbon is being conveyed to the Activators.

f. The wet scrubber associated with the E-Line Activators shall control emissions of particulate matter and sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the E-Line Activators are in operation. The permittee is required to use the wet scrubber associated with the E-Line Activators in order meet the applicable emission standards for particulate matter and sulfur dioxide.

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM / SO_2 Emission Rate = [Emission factor observed during last stack test (in pounds PM / SO_2 per ton carbon)] * [The hourly carbon throughput rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the wet scrubber, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the E-Line Activators are in operation during any period of malfunction of the associated wet scrubber, the permittee shall determine compliance through maintenance of the records required by paragraph 5.d. below.

c. Use of Afterburner:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Activators are in operation but the corresponding afterburner is not.

d. Use of Scrubber:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Activators is in operation but the corresponding scrubber is not.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

42	(E-05, 06)	Two (2) E-Line Activator Furnaces

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Amount of carbon processed through the E-Line Activators per month.
b. Hours of operation of the E-Line Activators per month.
c. The permittee shall maintain, calibrate and operate according to manufacturer's specification, monitoring devices for the continuous measurement of:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iv. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. The permittee shall visually inspect the E-Line Activator scrubber once per week during operation of the -Line Activators. The weekly inspection shall consist of the corresponding visual emissions observation as outlined in paragraph 5.d. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Amount of carbon processed through the E-Line Activators per month.
b. Hours of operation of the E-Line Activators per month.
c. Continuous records of the following information:
   i. The temperature in the combustion chamber of each afterburner.
   ii. The pressure loss of waste gas stream through each wet scrubber.
   iii. The scrubbing liquid pressure or flowrate to each wet scrubber.
d. During all periods of malfunction of the wet scrubber, if the E-Line Activators are in operation, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the wet scrubber stack;
   ii. Whether the visible emissions were normal for the wet scrubber stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the E-Line Activator wet scrubber stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. All maintenance activities performed at the wet scrubber and afterburner.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Activators are in operation but the associated scrubber is not in operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

42 (E-05, 06) Two (2) E-Line Activator Furnaces

7. Specific Control Equipment Operating Conditions:

For each E-Line Activators afterburner:

The afterburner shall operate at a minimum temperature of 1400°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

For each E-Line Activator wet scrubber:

a. The wet scrubber shall be operated at a minimum total flow rate of 350 gpm of liquid to the scrubber (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average flow rate of scrubbing liquid to the scrubber was below the minimum specified.
b. The wet scrubber shall be operated at a minimum total differential pressure drop of 6.0 inches of water (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average pressure drop across the wet scrubber was below the minimum specified.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

43 (E-07) 1. E-Line Packaging operations
2. D & E Activator to Packaging Conveyor
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the E-Line Packaging operations.

1. Operating Limitations:

The total weight of activated carbon processed at the E-Line Packaging operations shall not exceed 5.0 tons per hour and 41,160 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the E-Line Packaging operations each month.
b. Total weight of activated carbon processed at the E-Line Packaging operations during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the E-Line Packaging operations each month] ÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the E-Line Packaging operations shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of activated carbon processed at the E-Line Packaging operations (i.e.: The hourly activated carbon throughput rate determined in 1.d., above).

b. Emissions of particulate matter from the E-Line Packaging operations shall not exceed 49.39 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the E-Line Packaging operations shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
d. The baghouse associated with the E-Line Packaging operations shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the E-Line Packaging is in operation. The permittee is required to use the baghouse associated with the E-Line Packaging operations in order meet the particulate matter emission standard for the E-Line Packaging operations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

43 (E-07) 1. E-Line Packaging operations
2. D & E Activator to Packaging Conveyor

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the E-Line Packaging is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Packaging is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the E-Line Packaging operations each month.
b. Total hours of activated carbon processing during the month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the E-Line Packaging baghouse.
d. The permittee shall visually inspect the E-Line Packaging baghouse once per week during E-Line Packaging operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

43 (E-07)
1. E-Line Packaging operations
2. D & E Activator to Packaging Conveyor

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the E-Line Packaging operations each month.
b. Total hours of activated carbon processing during the month.
c. During all periods of malfunction of the baghouse, if the E-Line Packaging operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the E-Line Packaging operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the E-Line Packaging operations, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.
f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the E-Line Packaging operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

44 (M-6) D & E Bulk Loadout System
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:

401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the D & E Bulk Loadout System.

1. Operating Limitations:

The total weight of activated carbon processed at the D & E Bulk Loadout System shall not exceed 1.23 tons per hour and 10,797 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon processed at the D & E Bulk Loadout System each month.
b. Total weight of activated carbon processed at the D & E Bulk Loadout System during the previous 12 months.
c. Total hours of activated carbon processing during the month.
d. Hourly activated carbon throughput = [Total weight of activated carbon processed at the D & E Bulk Loadout System each month] ÷ [Total hours of activated carbon processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the D & E Bulk Loadout System shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of activated carbon processed at the D & E Bulk Loadout System (i.e.: The hourly activated carbon throughput rate determined in 1.d., above).

b. The opacity of visible emissions from the D & E Bulk Loadout System shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the D & E Bulk Loadout System shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the D & E Bulk Loadout System is in operation. The permittee is required to use the baghouse associated with the D & E Bulk Loadout System in order meet the particulate matter emission standard for the D & E Bulk Loadout System.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

44 (M-6) D & E Bulk Loadout System

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton activated carbon)] * [The hourly activated carbon throughput rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the D & E Bulk Loadout System is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the D & E Bulk Loadout System is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of activated carbon processed at the D & E Bulk Loadout System each month.

b. Total hours of activated carbon processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the D & E Bulk Loadout System baghouse.

d. The permittee shall visually inspect the D & E Bulk Loadout System baghouse once per week during D & E Bulk Loadout System operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon processed at the D & E Bulk Loadout System each month.

b. Total hours of activated carbon processing during the month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

E. E-LINE:

44 (M-6) D & E Bulk Loadout System

5. Specific Recordkeeping Requirements: (continued)

c. During all periods of malfunction of the baghouse, if the D & E Bulk Loadout System operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the D & E Bulk Loadout System operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

d. For the D & E Bulk Loadout System, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.

e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.

b. The occurrence, duration, cause, and any corrective action taken for each incident when the D & E Bulk Loadout System operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace - natural gas fired (30.0 mmBTU/hr, 13 burners)
- 9 spent carbon storage tanks
- 2 Process water storage tanks
- 1 rotary cooler
- 1 screener
- 3 conveyors
- 4 product bins and controls

Controls: Reactivation Furnace - Dry Scrubber (SO_2)
Baghouse (PM/PM_{10})
Afterburner (VOC)
Spent Carbon Storage Tanks - Carbon Adsorbers (VOC)

APPLICABLE REGULATIONS:

a. 401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the Reactivation Furnace.
b. 401 KAR 50:012, *General Application*, applies to the emissions of volatile organic compounds from the Reactivation Furnace.
c. 401 KAR 57:002, which incorporates by reference federal regulation 40 CFR 61 Subpart FF, *National emission standard for benzene waste operations*, applies to the Carbon Reactivation Process.

1. Operating Limitations:

a. The total weight of spent carbon processed at the Reactivation Furnace shall not exceed 3.0 tons per hour and 26,280 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].
b. The permittee shall not process any spent carbon containing radioactive material above background levels at the Reactivation Furnace [Permit O-94-020 (Revision 1)].
c. The permittee shall not process any spent carbon containing polychlorinated biphenyls (PCB) in excess of 50 mg/kg (milligrams per kilogram) at the Reactivation Furnace [Permit O-94-020 (Revision 1)].
d. The permittee shall operate and maintain a fixed roof and closed vent system that routes all organic vapors from the Spent Carbon Storage Tanks to a control device [40 CFR 61.343 (a)(1)]. Each Spent Carbon Storage Tank shall meet the requirements of 40 CFR 61.343(a)(1)(i). The closed vent system shall be operated in accordance with 40 CFR 61.349. In accordance with the provisions of 40 CFR 61.342(a), compliance with Operating Limitation 1.d. shall not be required when the permittee demonstrates that the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace

1. Operating Limitations: (continued)

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of spent carbon processed through the Reactivation Furnace each month.
b. Total weight of spent carbon processed through the Reactivation Furnace during the previous 12 months.
c. Total hours of operation of the Reactivation Furnace during each month.
d. Hourly spent carbon throughput = [Total weight of spent carbon processed through the Reactivation Furnace each month]÷ [Total hours of operation of the Reactivation Furnace during each month]

2. Emission Limitations:

a. Emissions of particulate matter from the Reactivation Furnace shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$

Where E = rate of emissions in lb/hr, and

P = process weight rate in tons/hr of carbon processed at the Reactivation Furnace (i.e.: The hourly spent carbon throughput rate determined in 1.d., above.).

However, at no time shall emissions of particulate matter from the Reactivation Furnace exceed 7.01 lb/hr [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].

b. Emissions of sulfur dioxide from the Reactivation Furnace shall not exceed 21.04 lb/hr [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. Emissions of volatile organic compounds (VOC) from the Reactivation Furnace shall not exceed 1.80 lb/hr [Permit O-94-020 (Revision 1)].
d. Emissions of nitrogen oxides from the Reactivation Furnace shall not exceed 26.90 lb/hr [Permit O-94-020 (Revision 1)].
e. Emissions of hydrogen fluoride from the Reactivation Furnace shall not exceed 0.50 lb/hr [Permit O-94-020 (Revision 1)].
f. Emissions of lead from the Reactivation Furnace shall not exceed 2.58 lb/hr [Permit O-94-020 (Revision 1)].
g. The opacity of visible emissions from the Reactivation Furnace shall not equal or exceed 10 percent [401 KAR 61:020, Section 3 (1) and Permit O-94-020 (Revision 1)].
h. There shall be no visible emissions from the transfer point baghouse to enclosed containers subsequently transferred to a landfill [Permit O-94-020 (Revision 1)].
i. The dry scrubber associated with the Reactivation Furnace shall control emissions of sulfur dioxide and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Reactivation Furnace is in operation. The permittee is required to use the dry scrubber associated with the Reactivation Furnace in order meet the sulfur dioxide emission standard for the Reactivation Furnace.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace

2. Emission Limitations: (continued)

j. The baghouse associated with the Reactivation Furnace shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Reactivation Furnace is in operation. The permittee is required to use the baghouse associated with the Reactivation Furnace in order meet the particulate matter emission standard for the Reactivation Furnace.

k. The afterburner shall control emissions of volatile organic compounds and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Reactivation Furnace is in operation [401 KAR 50:012, Section 1 (1)].

l. The closed vent system designed for control organic emissions from the Spent Carbon Storage Tanks shall meet the requirements of 40 CFR 61.349 (a)(1)(i)-(iv) *.

m. 40 CFR 61.349(2)(ii) - The carbon adsorption system shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emission vented to it with an efficiency of 98 weight percent or greater*.

* In accordance with the provisions of 40 CFR 61.342(a), compliance with Operating Limitations 2.l.and 2.m. shall not be required when the permittee demonstrates that the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr).

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM / VOC / NOx / SO_2 / HF / Pb Emission Rate = [Emission factor observed during last stack test (in pounds PM / VOC / NOx / SO_2 / HF / Pb per ton carbon)] * [The hourly spent carbon throughput rate determined in Compliance Demonstration Method 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.e. below.

ii. If the Reactivation Furnace is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.e. below.

c. Use of dry scrubber:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Reactivation Furnace is in operation but the corresponding dry scrubber is not in operation.

d. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Reactivation Furnace is in operation but the corresponding baghouse is not in operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace

2. Emission Limitations: (continued)
Compliance Demonstration Method:

e. Use of Afterburner:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Reactivation Furnace is in operation but the corresponding afterburner is not in operation.

f. Use of Carbon Adsorption System:
40 CFR 61.349(c) - The permittee shall demonstrate that the carbon adsorption system achieves the required control efficiency through one of the following methods:
(i) Engineering calculations in accordance with the requirements specified in 40 CFR 61.356(f); or
(ii) Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 40 CFR 61.355.

3. Testing Requirements:

a. Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
b. Whenever necessary, the permittee shall determine the total annual benzene quantity from facility waste in accordance with 40 CFR 61.355 (a).

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:
a. Total weight of spent carbon processed at the Reactivation Furnace each month.
b. Total hours of operation of the Reactivation Furnace.
c. The permittee shall calibrate, maintain, and operate according to manufacturer's specification monitoring devices for the continuous measurement of the following parameters:
i. Pressure loss of the gas stream through the Reactivation Furnace baghouse.
ii. Outlet temperature of the gas stream through the Reactivation Furnace baghouse.
iii. Outlet temperature of the gas stream through the Reactivation Furnace dry scrubber.
iv. Temperature in the combustion chamber of the Reactivation Furnace afterburner.
d. The permittee shall calibrate, maintain, and operate according to manufacturer's specification, a continuous emission monitor (CEM) for the measurement of the concentration of sulfur dioxide in the outlet gas stream from the Reactivation Furnace.
e. The permittee shall visually inspect the Reactivation Furnace baghouse once per week during Reactivation Furnace operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.e. below.
f. The permittee shall visually inspect (and repair as necessary) the closed vent system for the Spent Carbon Tanks on a quarterly basis in accordance with 40 CFR 61.349 (f) and (g).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace

4. Specific Monitoring Requirements: (continued)

g. 40 CFR 61.354 (d) - For the carbon adsorbers, the permittee shall obtain samples of the carbon in the adsorption units on a quarterly basis and shall analyze the samples for determination of the Apparent Density. Replacement of the carbon shall be required when
   i. the measured Apparent Density exceeds 0.7, **OR**
   ii. on an annual basis, whichever occurs first.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of spent carbon processed at the Reactivation Furnace each month.
b. Total hours of operation of the Reactivation Furnace.
c. Continuous records of the following information:
   i. Outlet temperature of the gas stream through the Reactivation Furnace baghouse.
   ii. Outlet temperature of the gas stream through the Reactivation Furnace dry scrubber.
   iii. Temperature in the combustion chamber of the Reactivation Furnace afterburner.
d. Continuous records of the concentration of sulfur dioxide in the outlet gas stream from the Reactivation Furnace.
e. During all periods of malfunction of the baghouse, if the Reactivation Furnace operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Reactivation Furnace operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
f. For the Reactivation Furnace baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
g. All maintenance activities performed at the baghouse, dry scrubber, afterburner and carbon adsorber.
h. 40 CFR 61.356 (d) - The permittee shall maintain engineering design documentation for the carbon adsorption system that is installed on the Spent Carbon Storage Tanks. The documentation shall be retained for the life of the carbon adsorption system.
i. 40 CFR 61.356 (f) - The permittee shall maintain records for the carbon adsorption system in accordance with 40 CFR 61.356 (f)(1) and 61.356 (2)(i)(G).
j. 40 CFR 61.356(g) - The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace

5. Specific Recordkeeping Requirements: (continued)

k. For the Spent Carbon Storage Tanks, the permittee shall maintain a record of each test of no detectable emissions required by 40 CFR 61.343. The record shall contain the information required by 40 CFR 61.356 (h).

l. For the Carbon Adsorption System, the permittee shall maintain the records required by 40 CFR 61.356 (j).

m. For the Carbon Adsorbers, the permittee shall maintain records of the quarterly Apparent Density analytical results and the associated carbon replacement events.

n. The permittee shall maintain records of the following information for each approved customer application type of spent carbon that will be processed at the Reactivation Furnace:

i. A complete organic analysis of the spent carbon used at any RCRA site.

ii. A certification from all sources of spent carbon stating that no dioxin adsorption has occurred on the spent carbon and no PCB adsorption in excess of 50 mg/kg has occurred on the spent carbon.

iii. If the spent carbon has a chloride content of greater than 4.0% by weight, then the permittee shall submit a written notice to the division, with a copy to the division's Ashland Regional Office, of the intent to process such carbon at least 5 days prior to processing. The notice shall contain the following information:

(1) The source of the spent carbon;

(2) The chlorine and sulfur content;

(3) The maximum processing rate of the carbon, and calculations demonstrating that emissions of HCl do not exceed 2.55 lbs/hr.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the emission limitations outlined in paragraphs 2.a., and 2.c. – h., above, within thirty days of when the exceedance is determined.

b. [Permit O-94-020 (Revision 1)] - The permittee shall submit to the division, a written report of all exceedances of the sulfur dioxide emission limit outlined in paragraph 2.b., above (21.04 lbs/hr), on a 3-hour average basis, as measured by the SO_2 continuous emission monitor (CEM).

c. The occurrence, duration, cause, and any corrective action taken for each incident when the Reactivation Furnace operations are in progress but the associated dry scrubber, baghouse, afterburner, and carbon adsorption system are not in operation.

7. Specific Control Equipment Operating Conditions:

a. [Permit O-94-020 (Revision 1)] - The permittee shall operate and maintain furnace feed shutdown systems that are activated if:

i. The dry scrubber atomizer wheel stops.

ii. The spray dryer outlet temperature exceeds the maximum continuous service temperature rating of the dust collector bags.

iii. The furnace afterburner system stack temperature fall below 1600°F (3-hour average).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

45 (CAS-01) Reactivation Furnace

7. Specific Control Equipment Operating Conditions: (continued)

b. [Permit O-94-020 (Revision 1)] - The permittee shall operate and maintain process alarms that are activated if:
   i. The furnace afterburner system stack temperature fall below 1625°F (3-hour average).
   ii. The baghouse outlet temperature falls below 200°F (3-hour average).
   iii. The dry scrubber outlet temperature falls below 200°F (3-hour average).
   iv. The dry scrubber and baghouse catch disposal silo fills to within 12 inches of its top.

c. The Reactivation Furnace afterburner shall be operated at a minimum temperature of 1625°F (3-hour average). An **excursion** from the operating range specified is any 3-hour period during which the average temperature in the afterburner was below the minimum specified.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

48 (CAS-06) Waste Disposal Silo
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the Waste Disposal Silo.

1. Operating Limitations:

The total weight of waste processed at the Waste Disposal Silo shall not exceed 3.0 tons per hour and 26,208 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of waste processed at the Waste Disposal Silo each month.
b. Total weight of waste processed at the Waste Disposal Silo during the previous 12 months.
c. Total hours of waste processing during the month.
d. Hourly waste throughput = [Total weight of waste processed at the Waste Disposal Silo each month] ÷ [Total hours of waste processing during the month]

2. Emission Limitations:

a. Emissions of particulate matter from the Waste Disposal Silo shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:

For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of waste processed at the Waste Disposal Silo (i.e.: The hourly waste throughput rate determined in 1.d., above).

b. The opacity of visible emissions from the Waste Disposal Silo shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the Waste Disposal Silo shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the silo is loaded or unloading. The permittee is required to use the baghouse associated with each silo in order meet the respective particulate matter emission standard for the Waste Disposal Silo.

Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton waste)] ÷ [The hourly waste throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

48 (CAS-06) Waste Disposal Silo

2. Emission Limitations: (continued)
Compliance Demonstration Method:

b. Opacity Limit:
   i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below..
   ii. If the Waste Disposal Silo is loaded or unloaded during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:
   The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Waste Disposal Silo is loaded or unloaded but the corresponding baghouse is not in operation.

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the following parameters:
a. Amount of waste loaded into the Waste Disposal Silo per month.
b. Hours of waste handling at the Waste Disposal Silo per month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Waste Disposal Silo baghouse.
d. The permittee shall visually inspect the Waste Disposal Silo baghouse once per week. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

5. Specific Recordkeeping Requirements:
The permittee shall maintain records of the following information:
a. Amount of waste loaded into the Waste Disposal Silo per month.
b. Hours of loading for the Waste Disposal Silo per month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

48 (CAS-06) Waste Disposal Silo

5. Specific Recordkeeping Requirements: (continued)

c. During all periods of malfunction of the baghouse, if the Waste Disposal Silo operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Waste Disposal Silo operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

d. For the Waste Disposal Silo baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.

e. All maintenance activities performed at the baghouse.

f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.

b. The occurrence, duration, cause, and any corrective action taken for each incident when the Waste Disposal Silo operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

49 (CAS-07) Soda Ash Storage Silo
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the Soda Ash Storage Silo.

1. Operating Limitations:
The total weight of soda ash processed at the Soda Ash Storage Silo shall not exceed 3.0 tons per hour and 26,280 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:
The permittee shall maintain monthly records of the following information:
a. Total weight of soda ash processed at the Soda Ash Storage Silo each month.
b. Total weight of soda ash processed at the Soda Ash Storage Silo during the previous 12 months.
c. Total hours of soda ash processing during the month.
d. Hourly soda ash throughput = [Total weight of soda ash processed at the Soda Ash Storage Silo each month] ÷ [Total hours of soda ash processing during the month]

2. Emission Limitations:
a. Emissions of particulate matter from the Soda Ash Storage Silo shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of soda ash processed at the Soda Ash Storage Silo (i.e.: The hourly soda ash throughput rate determined in 1.d., above).
b. The opacity of visible emissions from the Soda Ash Storage Silo shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the Soda Ash Storage Silo shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the silo is loaded or unloading. The permittee is required to use the baghouse associated with each silo in order meet the respective particulate matter emission standard for the Soda Ash Storage Silo.

Compliance Demonstration Method:
a. Mass Emission Standard:
Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton soda ash)] * [The hourly soda ash throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

49 (CAS-07) Soda Ash Storage Silo

2. Emission Limitations: (continued)
Compliance Demonstration Method:

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below..

ii. If the Soda Ash Storage Silo is loaded or unloaded during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Soda Ash Storage Silo is loaded or unloaded but the corresponding baghouse is not in operation.

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the following parameters:

a. Amount of soda ash loaded into the Soda Ash Storage Silo per month.
b. Hours of operation of the Soda Ash Storage Silo per month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Soda Ash Storage Silo baghouse.
d. The permittee shall visually inspect the Soda Ash Storage Silo baghouse once per week. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

5. Specific Recordkeeping Requirements:
The permittee shall maintain records of the following information:

a. Amount of soda ash loaded into the Soda Ash Storage Silo per month.
b. Hours of loading for the Soda Ash Storage Silo per month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

49 (CAS-07) Soda Ash Storage Silo

5. Specific Recordkeeping Requirements: (continued)

c. During all periods of malfunction of the baghouse, if the Soda Ash Storage Silo operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Soda Ash Storage Silo operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.

d. For the Soda Ash Storage Silo baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.

e. All maintenance activities performed at the baghouse.

f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.

b. The occurrence, duration, cause, and any corrective action taken for each incident when the Soda Ash Storage Silo operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

50 (A-15) Pulverizer Collection System
Pulverizer Elevator
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the Pulverizer Collection System.

1. **Operating Limitations:**
The total weight of fines processed at the Pulverizer Collection System shall not exceed 3.0 tons per hour and 25,200 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:
The permittee shall maintain monthly records of the following information:
a. Total weight of fines processed at the Pulverizer Collection System each month.
b. Total weight of fines processed at the Pulverizer Collection System during the previous 12 months.
c. Total hours of fines processing during the month.
d. Hourly fines throughput = [Total weight of fines processed at the Pulverizer Collection System each month] ÷ [Total hours of fines processing during the month]

2. **Emission Limitations:**
a. Emissions of particulate matter from the Pulverizer Collection System shall not exceed the
allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of fines processed at the Pulverizer Collection System (i.e.: The hourly fines throughput rate determined in 1.d., above).
b. Emissions of particulate matter from the Pulverizer Collection System shall not exceed 35.95 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the Pulverizer Collection System shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
d. The baghouse associated with the Pulverizer Collection System shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Pulverizer Collection System is in operation. The permittee is required to use the baghouse associated with the Pulverizer Collection System in order meet the particulate matter emission standard for the Pulverizer Collection System.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

50 (A-15) Pulverizer Collection System

2. Emission Limitations: (continued)
Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton of fines)] * [The hourly fines throughput rate determined in 1.d., above]

b. Opacity Limit:
i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below..
ii. If the Pulverizer Collection System is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Pulverizer Collection System is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the following parameters:
a. Total weight of fines processed at the Pulverizer Collection System each month.
b. Total hours of fines processing during the month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Pulverizer Collection System baghouse.
d. The permittee shall visually inspect the Pulverizer Collection System baghouse once per week during Pulverizer Collection System operations. The weekly inspection shall consist of a visual evaluation of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

50 (A-15) Pulverizer Collection System

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of fines processed at the Pulverizer Collection System each month.
b. Total hours of fines processing during the month.
c. During all periods of malfunction of the baghouse, if the Pulverizer Collection System operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Pulverizer Collection System operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the Pulverizer Collection System baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the Pulverizer Collection System operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

51 (C-09) A, B, C & Acid Wash Fines Packaging System
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 61:020, *Existing Process Operations*, applies to the emissions of particulate matter from the A, B, C & Acid Wash Fines Packaging System.

1. **Operating Limitations:**
The total weight of fines processed at the A, B, C & Acid Wash Fines Packaging System shall not exceed 1.0 tons per hour and 8,760 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:
The permittee shall maintain monthly records of the following information:
a. Total weight of fines processed at the A, B, C & Acid Wash Fines Packaging System each month.
b. Total weight of fines processed at the A, B, C & Acid Wash Fines Packaging System during the previous 12 months.
c. Total hours of fines processing during the month.
d. Hourly fines throughput = [Total weight of fines processed at the A, B, C & Acid Wash Fines Packaging System each month]÷ [Total hours of fines processing during the month]

2. **Emission Limitations:**
a. Emissions of particulate matter from the A, B, C & Acid Wash Fines Packaging System shall
not exceed the allowable rate limit as calculated by the following equation [401 KAR 61:020, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 4.10P^{0.67}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of fines processed at the A, B, C & Acid Wash Fines Packaging System (i.e.: The hourly fines throughput rate determined in 1.d., above).
b. The opacity of visible emissions from the A, B, C & Acid Wash Fines Packaging System shall not equal or exceed 40 percent [401 KAR 61:020, Section 3 (1)].
c. The baghouse associated with the A, B, C & Acid Wash Fines Packaging System shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the A, B, C & Acid Wash Fines Packaging System is in operation. The permittee is required to use the baghouse associated with the A, B, C & Acid Wash Fines Packaging System in order meet the particulate matter emission standard for the A, B, C & Acid Wash Fines Packaging System.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

51 (C-09) A, B, C & Acid Wash Fines Packaging System

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor* observed during last stack test (in pounds PM/per ton of fines)] * [The hourly fines throughput rate determined in 1.d., above]

*Alternate emission factor may be established based on demonstration of similarity to other tested sources and/or estimated using credible engineering judgement based on conservative assumptions.

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the A, B, C & Acid Wash Fines Packaging System is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the A, B, C & Acid Wash Fines Packaging System is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of fines processed at the A, B, C & Acid Wash Fines Packaging System each month.

b. Total hours of fines processing during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the A, B, C & Acid Wash Fines Packaging System baghouse.

d. The permittee shall visually inspect the A, B, C & Acid Wash Fines Packaging System baghouse once per week during A, B, C & Acid Wash Fines Packaging System operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

51 (C-09) A, B, C & Acid Wash Fines Packaging System

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of fines processed at the A, B, C & Acid Wash Fines Packaging System each month.
b. Total hours of fines processing during the month.
c. During all periods of malfunction of the baghouse, if the A, B, C & Acid Wash Fines Packaging System operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the A, B, C & Acid Wash Fines Packaging System operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the A, B, C & Acid Wash Fines Packaging System, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.
f. If an emission factor from other than testing is used, the emission factor and its supporting assumptions from Compliance Demonstration Method 2.a., above.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the A, B, C & Acid Wash Fines Packaging System operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

52 (F-01) Activated Carbon Fine Mesh Production
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the Activated Carbon Fine Mesh Production unit.

1. Operating Limitations:

The total weight of activated carbon fines produced at the Activated Carbon Fine Mesh Production unit shall not exceed 2.0 tons per hour and 17,520 tons during any consecutive 12 months [Permit O-94-020 (Revision 1)].

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of activated carbon fines produced at the Activated Carbon Fine Mesh Production unit each month.
b. Total weight of activated carbon fines produced at the Activated Carbon Fine Mesh Production unit during the previous 12 months.
c. Total hours of operation of the Activated Carbon Fine Mesh Production unit during the month.
d. Hourly activated carbon fines production rate =
[Total weight of activated carbon fines produced at the Activated Carbon Fine Mesh Production unit each month] ÷ [Total hours of operation of the Activated Carbon Fine Mesh Production unit during the month]

2. Emission Limitations:

a. Emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of activated carbon fines produced (i.e.: The hourly activated carbon fines production rate determined in 1.d., above).
b. Emissions of particulate matter from the Activated Carbon Fine Mesh Production unit shall not exceed 12.42 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the Activated Carbon Fine Mesh Production unit shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].
d. The baghouse associated with the Activated Carbon Fine Mesh Production unit shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Activated Carbon Fine Mesh Production unit is in operation. The permittee is required to use the baghouse associated with the Activated Carbon Fine Mesh Production unit in order meet the particulate matter emission standard for the Activated Carbon Fine Mesh Production unit.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

52 (F-01) Activated Carbon Fine Mesh Production

2. Emission Limitations: (continued)
Compliance Demonstration Method:

a. Mass Emission Standard:
Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton of fines)] * [The hourly activated carbon fines production rate determined in 1.d., above]

b. Opacity Limit:
i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.
ii. If the Activated Carbon Fine Mesh Production unit is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:
The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Activated Carbon Fine Mesh Production unit is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:
Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:
The permittee shall monitor the following parameters:

a. Total weight of activated carbon fines produced at the Activated Carbon Fine Mesh Production unit each month.
b. Total hours of operation of the Activated Carbon Fine Mesh Production unit during the month.
c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Activated Carbon Fine Mesh Production baghouse.
d. The permittee shall visually inspect the Activated Carbon Fine Mesh Production baghouse once per week during Activated Carbon Fine Mesh Production operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

52 (F-01) Activated Carbon Fine Mesh Production

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of activated carbon fines produced at the Activated Carbon Fine Mesh Production unit each month.
b. Total hours of operation of the Activated Carbon Fine Mesh Production unit during the month.
c. During all periods of malfunction of the baghouse, if the Activated Carbon Fine Mesh Production operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Activated Carbon Fine Mesh Production operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the Activated Carbon Fine Mesh Production unit baghouse, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the Activated Carbon Fine Mesh Production operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

53 (CAS-09) Reactivation Process for Custom Product
Controls: Baghouse (PM/PM_{10})

APPLICABLE REGULATIONS:
401 KAR 59:010, *New Process Operations*, applies to the emissions of particulate matter from the Reactivation Process for Custom Product unit.

1. Operating Limitations:

The total weight of custom product reactivated at the Reactivation Process for Custom Product unit shall not exceed 2.50 tons per hour and 21,840 tons during any consecutive 12 months.

Compliance Demonstration Method:

The permittee shall maintain monthly records of the following information:

a. Total weight of custom product reactivated at the Reactivation Process for Custom Product unit each month.
b. Total weight of custom product reactivated at the Reactivation Process for Custom Product unit during the previous 12 months.
c. Total hours of operation of the Reactivation Process for Custom Product unit during the month.
d. Hourly custom product reactivation rate =
[Total weight of custom product reactivated at the Reactivation Process for Custom Product unit each month] ÷ [Total hours of operation of the Reactivation Process for Custom Product unit during the month]

2. Emission Limitations:

a. Emissions of particulate matter shall not exceed the allowable rate limit as calculated by the following equation [401 KAR 59:010, Section 3 (2)]:
For process rates up to 60,000 lb/hr: $E = 3.59P^{0.62}$
Where E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr of custom product reactivated (i.e.: The hourly custom product reactivation rate determined in 1.d., above).
b. Emissions of particulate matter from the Reactivation Process for Custom Product shall not exceed 2.48 tons during any consecutive 12 months [*Synthetic Minor Limit*, Permit O-94-020 (Revision 1)].
c. The opacity of visible emissions from the Reactivation Process for Custom Product shall not equal or exceed 20 percent [401 KAR 59:010, Section 3 (1)].
d. The baghouse associated with the Reactivation Process for Custom Product unit shall control emissions of particulate matter and be operated properly in accordance with manufacturer's specifications and/or standard operating procedures at all times the Reactivation Process for Custom Product unit is in operation. The permittee is required to use the baghouse associated with the Reactivation Process for Custom Product unit in order meet the particulate matter emission standard for the Reactivation Process for Custom Product unit.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

53 (CAS-09) Reactivation Process for Custom Product

2. Emission Limitations: (continued)

Compliance Demonstration Method:

a. Mass Emission Standard:

Actual PM Emission Rate = [Emission factor observed during last stack test (in pounds PM/per ton of custom product)] * [The hourly custom product reactivation rate determined in 1.d., above]

b. Opacity Limit:

i. During periods of normal operation of the baghouse, no compliance demonstration is necessary other than the weekly visual inspection required by paragraph 4.d. below.

ii. If the Reactivation Process for Custom Product unit is in operation during any period of malfunction of its associated baghouse, the permittee shall determine compliance through maintenance of the records required by paragraph 5.c. below.

c. Use of Baghouse:

The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the Reactivation Process for Custom Product unit is in operation but the corresponding baghouse is not in operation.

3. Testing Requirements:

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following parameters:

a. Total weight of custom product reactivated at the Reactivation Process for Custom Product unit each month.

b. Total hours of operation of the Reactivation Process for Custom Product unit during the month.

c. The permittee shall install, calibrate, maintain, and operate according to manufacturer's specification a monitoring device for the continuous measurement of the pressure loss of the gas stream through the Reactivation Process for Custom Product baghouse.

d. The permittee shall visually inspect the Reactivation Process for Custom Product baghouse once per week during Reactivation Process for Custom Product operations. The weekly inspection shall consist of a visual inspection of the physical condition of the external unit, combined with the corresponding visual emissions observation as outlined in paragraph 5.c. below.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

53 (CAS-09) Reactivation Process for Custom Product

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of the following information:

a. Total weight of custom product reactivated at the Reactivation Process for Custom Product unit each month.
b. Total hours of operation of the Reactivation Process for Custom Product unit during the month.
c. During all periods of malfunction of the baghouse, if the Reactivation Process for Custom Product operations are in progress, a daily (calendar day) log of the following information shall be kept:
   i. Whether any air emissions were visible from the baghouse stack;
   ii. Whether the visible emissions were normal for the baghouse stack;
   iii. The cause of any abnormal emissions and any corrective action taken.

   If visible emissions are observed, the permittee shall perform a Method 9 reading as outlined in Appendix M to 40 CFR Part 51 for the Reactivation Process for Custom Product operations baghouse stack. The opacity observed shall be recorded in the daily log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
d. For the Reactivation Process for Custom Product unit, a record of the following information:
   i. A record of the weekly reading of the pressure loss of the gas stream through the baghouse as indicated by the continuous monitor.
   ii. Findings of the weekly visual inspection and any corrective actions taken as a result.
e. All maintenance activities performed at the baghouse.

6. Specific Reporting Requirements:

The permittee shall submit a report of the following information to the Division for Air Quality's Ashland office in accordance with section F. 7. and F. 8:

a. Any exceedance of the particulate matter and opacity emission limitations within thirty days of when the exceedance is determined.
b. The occurrence, duration, cause, and any corrective action taken for each incident when the Reactivation Process for Custom Product operations are in progress but the associated baghouse is not in operation.

7. Specific Control Equipment Operating Conditions: None.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

64 (M-07) Temporary Package Boiler
Rating: 27.0 mmBTU/hr
Fuel: Natural gas
Date of construction: 2002

APPLICABLE REGULATIONS:

a. 401 KAR 59:015, *New indirect heat exchangers*, applies to the Temporary Package Boiler.
b. 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, applies to the Temporary Package Boiler.

1. **Operating Limitations:** Natural gas shall be the only type of fuel combusted in the package boiler.

2. **Emission Limitations:**
   a. Emissions of particulate matter shall not exceed 0.325 lb/mmBTU [401 KAR 59:015, Section 4(1)(c)].
   b. Emissions of sulfur dioxide shall not exceed 1.166 lb/mmBTU [401 KAR 59:015, Section 5(1)(c)].
   c. The opacity of visible emissions shall not exceed 20 percent [401 KAR 59:015, Section 4 (2)] except as provided below:
      i. Pursuant to 401 KAR 59:015, Section 4(2)(b), a maximum of 40% opacity is permissible for not more than 6 consecutive minutes in any 60 consecutive minute period during cleaning the fire box or blowing soot.
      ii. Pursuant to 401 KAR 59:015, Section 4(2)(c), the opacity standard does not apply during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
      iii. Pursuant to 401 KAR 50:055, Section 2(4), the opacity standard does not apply during periods of startup and shutdown.

   Compliance Demonstration Method:

   Mass Emission Limits:

   The Package Boiler shall be deemed to be in compliance with the applicable mass emission standards (lb/mmBTU) for particulate matter and sulfur dioxide while natural gas is the only fuel used.

   Opacity Limit:

   The Package Boiler shall be deemed to be in compliance with the applicable visible emission standard while natural gas is the only fuel used.

3. **Testing Requirements:**
   Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

64 (M-07) Temporary Package Boiler (Continued)

4. **Specific Monitoring Requirements:**
   The permittee shall monitor the natural gas consumption of the Package boiler.

5. **Specific Recordkeeping Requirements:**
   The permittee shall record and maintain records of the amount of natural gas combusted during each day [40 CFR 60.48c(g)].

6. **Specific Reporting Requirements:** None.

7. **Specific Control Equipment Operating Conditions:** Not applicable.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	Description	Generally Applicable Regulation
1. 46	(CAS-02) Furnace Feedtank and Dewatering Screw	None.
2. 47	(CAS-03) Wastewater Storage Tank	None.
3. 58	Six (6) Soda Ash Slurry Mix Tanks	None.
4. 63	Two (2) Hydrochloric Acid Storage Tanks	None.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter, sulfur dioxide, and volatile organic compounds (VOC) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Ashland Regional Office
1550 Wolohan Dr., Suite 1
Ashland, KY 41102-8942

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

12. For the purposes of this permit, in accordance with the provisions of Regulation 40 CFR 63 Subpart A, a continuous recording device is defined as one that capable of recording a minimum of one data sample every 15 minutes. Data from continuous recording devices unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities are being performed.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    (a) Applicable requirements that are included and specifically identified in the permit and
    (b) Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:02+0 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements
Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein in accordance with the terms and conditions of this permit.

V-00-015: *(EP #11) B-Line Bakers*

V-00-015, Revision 1: (EP #64) *Temporary Package Boiler*

SECTION G - GENERAL PROVISIONS (CONTINUED)

V-00-015, Revision 2: (EP #14) Scrubber for *B-Line Activator Furnace #3*
(EP #21) Scrubber for *C-Line Activator Furnaces #5 and #6*

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.
   c. The date when the maximum production rate specified in the permit application was achieved.

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

Not Applicable

SECTION I - COMPLIANCE SCHEDULE

This section contains compliance schedule requirements as specified by Section 1c of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26. Progress reports on this schedule must be submitted at least semiannually, or at more frequent intervals if required in the specific conditions outlined below. Reports shall include the following items: (a) Dates scheduled for achieving each milestone, and the actual date that compliance is achieved; and (b) An explanation of why dates in /the schedule of compliance were not or will not be met, and preventive or corrective measures adopted to ensure that compliance with future items will be brought back on schedule. Compliance certifications shall be mailed to the addresses listed in General Condition F.9

1. Within 30 days of issuance of the proposed permit, the permittee shall submit a compliance schedule for the implementation of any new monitoring, recordkeeping, and reporting requirements included herein for emission points already in operation. The compliance schedule shall provide justification for the planned implementation of any requirements that will exceed 60 days.

2. No later than 60 days after the installation of the wet scrubbers on the B-Line Activator (Furnace #3) and the C-Line Activators (Furnaces #5 & #6), the permittee shall schedule stack tests for sulfur dioxide and particulate matter on the B-Line Activator (Furnace #3) and the C-Line Activators (Furnaces #5 & #6). No later than 45 days after the tests are conducted, the permittee shall submit to the Division, an accurate and comprehensive report on the results of the stack tests conducted on the B-Line Activator (Furnace #3) and the C-Line Activators (Furnaces #5 & #6).